



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

Johns Manville Corporation
717 17th Street
Denver, CO 80202

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: JM PVC Single Ply Roof Systems over Recover Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 12-0410.05 and consists of pages 1 through 32.

The submitted documentation was reviewed by Jorge L. Acebo.



NOA No.: 12-1113.22
Expiration Date: 12/06/17
Approval Date: 06/26/14
Page 1 of 32

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Single Ply
Material: PVC
Deck Type: Recover
Maximum Design Pressure: See specific assemblies.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
JM PVC	50 mil x 39" or 78" x 100' 60 mil x 39" or 78" x 100' 80 mil x 39" or 78" x 75'	ASTM D4434	PVC polyester reinforced membrane
JM PVC Fleece Backed	50 mil x 76" x 90' 60 mil x 76" x 90'	ASTM D4434	PVC polyester reinforced membrane backed with a lightweight polyester fleece.
DynaFast 180 S	39-3/8" x 49'2"	ASTM D6164	A polyester reinforced SBS modified bitumen base or inner ply sheet.
JM Urethane Insulation Adhesive	N/A	Proprietary	Urethane insulation adhesive
JM Two Part Urethane Insulation Adhesive	N/A	Proprietary	A two-part urethane insulation adhesive
MBR Bonding Adhesive	N/A	Proprietary	A two-part insulation and membrane adhesive
JM PVC Membrane Adhesive (Low VOC)	N/A	Proprietary	Low solvent based adhesive
JM PVC Membrane Adhesive (Water Based)	N/A	Proprietary	Water borne adhesive
JM PVC Profile	1-1/2" wide x 1-1/4" high x 10' long	Proprietary	Non-reinforced, extruded PVC for simulating the aesthetics of standing seam metal roofing.
JM PVC Spine	3/4" wide x 13/16" high x 7' long	Proprietary	Non-reinforced, extruded PVC for simulating the aesthetics of standing seam metal roofing.
JM PVC Penetration Pan	Various	ASTM D4434	Molded PVC for flashing penetration.
JM PVC Pipe Boots	Various	ASTM D4434	Non-reinforced molded PVC flashing penetrations.



<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
JM PVC Universal Corner	Various	ASTM D4434	Non-reinforced molded PVC for inside and outside corner flashing.
JM PVC T-Joint Patch	Various	ASTM D4434	Non-reinforced PVC used to cover T-joints and fasteners
JM PVC Detail Membrane	Various	ASTM D4434	Non-reinforced PVC used for pipe and corner flashing.
JM PVC Detail Strip	Various	ASTM D4434	PVC used to waterproof joints.
JM PVC Coated Metal	Various	ASTM D4434	JM PVC laminated onto galvanized steel for metal flashings and edge details.
JM PVC Walkpad	Various	ASTM D4434	Textured PVC walk pad.
JM PVC Heavy-Duty Walkpad	Various	ASTM D4434	Textured PVC walk pad.

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI	Isocyanurate Insulation	Johns Manville
ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm 25 PSI, ValuTherm CGF, ValuTherm 25 PSI	Isocyanurate Insulation with glass reinforced facers	Johns Manville
Invinsa Roof Board	High-density Polyisocyanurate with fiber glass reinforced facers	Johns Manville
JM SECUROCK Gypsum-Fiber Roof Board	Fiber reinforced gypsum cover board	Johns Manville
Dens-Deck	Silicon treated gypsum	Georgia Pacific Gypsum LLC



APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	High Load Fasteners	Insulation and membrane fastener	Various	Johns Manville
2.	High Load Plates	Galvanized steel plates for use with High Load Fasteners	2-3/8" diameter	Johns Manville
3.	Extra High Load Fastener	Truss head, self-drilling, pinch point, high thread fastener	#21 x 16" max. length	Johns Manville
4.	Extra High Load Plate	Round galvanized steel stress plates for use with Extra high load fasteners.	3" round	Johns Manville
5.	UltraFast Fastener	Insulation Fastener	#12 x 8" max. Length, #3 Phillips head	Johns Manville
6.	UltraFast 3" Round Metal Plate or UltraFast Square Recessed Metal Plate	Galvalume AZ55 steel plate	3" round & 3" square	Johns Manville
7.	All Purpose Fastener	Insulation and membrane fastener	#14 x 4" max. #3Phillips hd	Johns Manville
8.	Purlin Fastener	Hex-Head membrane fastener	#12 x 8" max. length	Johns Manville
9.	PVC RhinoPlate	Membrane bonding plate	3" Round	Johns Manville
10.	High Load LH	fastener for steel, wood, or concrete	#15 x 14" max. Oversize #3 Phillips head	Johns Manville
11.	Polymer Membrane Batten	Membrane anchors	1" plastic strips	Johns Manville
12.	JM APB Plates	Membrane plates	2" round steel plate	Johns Manville
13.	Twin Loc-Nail	Base sheet fastener <i>with and without</i> integrated Plate.	2.7" dia. Plate	Altenloh, Brink & Co. U.S., Inc.
14.	Straight Line Batten Bar	Oval pre-punched metal batten bar	1" x100' coil	Altenloh, Brink & Co. U.S., Inc.

EVIDENCE SUBMITTED:

<u>Test Agency Name</u>	<u>Identifier</u>	<u>Report</u>	<u>Date</u>
FM Approvals	3025881	FM 4450	08/09/06
	3016629	FM 4470	12/12/03
	3018807	FM 4470	06/25/04
	3014692	FM 4470	08/05/03
	3015444	FM 4450	07/11/03
	3012321	FM 4470	07/29/02
	3014751	FM 4450	08/27/03
	3009502	FM 4470	12/21/00
	3008869	FM 4470	03/19/01
	3025245	FM 4470	03/24/08
	3025170	FM 4470	12/10/07
	3031670	FM 4470	12/10/07
	3033308	FM 4470	09/03/08
	3037110	FM 4470	10/03/09
	3037540	FM 4450	10/20/10
	3040105	FM 4470	11/24/10
	3035538	FM 4470	05/25/10
Momentum Technologies, Inc.	NX21J0A	ASTM D 4434	06/01/11
	NX21J0B	ASTM D 4434	07/20/11
	NX21J0C	ASTM D 4434	06/01/11
PRI Construction Materials Technologies, LLC	JMC-088-02-01	ASTM D1867/TAS 117(B)	09/06/13
	JMC-086-02-01	FM 4474/TAS114	01/03/13
	JMC-107-02-01-R2	ASTM D5147/D903/D1876 TAS 117(A)/(B)/(C)	08/19/13
	JMC-108-02-01	TAS 114(J)	04/16/13
	JMC-109-02-01	TAS 114(J)	08/20/13
	JMC-114-02-01	TAS 114(J)	08/20//13
	JMC-131-02-01	TAS 114(J)	08/20/13
	JMC-141-02-01	TAS 114(J)	04/18/13
	JMC-168-02-01	TAS 114(J)	08/20/13
Trinity ERD	J45020.05.13-1	TAS 114	05/16/13
	J45020.09.13-1-R1	TAS 114-C	09/12/13

APPROVED ASSEMBLIES

Membrane Type: Single Ply, PVC
Deck Type 7I: Recover, Insulated
Deck Description: Concrete

System Type A(1): One or more layers of insulation adhered with approved adhesive to existing BUR; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
Invinsa Roof Board Minimum ¼" thick	N/A	N/A

Note: Invinsa Roof Board shall fully adhered to the existing BUR with MBR Bonding Adhesive at a rate of 1.5 gal/sq. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Membrane fully adhered to the insulation as specified below.

Option #1: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) at a rate of 0.83 gal./sq. on both membrane and substrate with min. 1.5" heat welded side laps.

Option #2: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Water Based) at a rate of 0.67 gal./sq., on both membrane and substrate with min. 1.5" heat welded side laps.

Maximum Design Pressure: -112.5 psf. (See General Limitation #9.)

Membrane Type: Single Ply, PVC
Deck Type 7I: Recover, Insulated
Deck Description: Concrete
System Type A(2): One or more layers of insulation adhered with approved adhesive to existing BUR; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with JM Two-Part Urethane Insulation Adhesive in ¾" ribbons spaced 12" o.c. (with all insulations not 25 PSI) or JM Urethane Insulation Adhesive in ½" ribbons spaced 6" o.c. (with all insulations with 25 PSI) Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
Invinsa Roof Board		
Minimum ¼" thick	N/A	N/A

Note: Invinsa Roof Board shall be adhered to the insulation with JM Urethane Insulation Adhesive in ½" ribbons spaced 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Membrane fully adhered to the insulation as specified below.

Option #1: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) at a rate of 0.83 gal./sq. on both membrane and substrate, and heat-welded 1.5" side laps.

Option #2: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Water Based) at a rate of 0.67 gal./sq., on both membrane and substrate and heat-welded 1.5" side laps.

Maximum Design Pressure: -112.5 psf. (See General Limitation #9.)

Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(3): One or more layers of insulation adhered with approved asphalt or adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Invinsa Roof Board Minimum ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with ¾" wide beads of JM Two-Part Urethane Insulation Adhesive, 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Fleece Backed Membrane fully adhered to the insulation as specified below.

Option #1: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Water Based) applied at a rate of 1 gal./sq., with min. 1.5" heat welded side laps on the substrate.

Option #2: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Option #3: Membrane is fully adhered to the insulation with approved hot asphalt applied at 20-25 lb./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -105 psf. (See General Limitation #9.)

Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(4): One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with ¾" wide beads of JM Two-Part Urethane Insulation Adhesive, 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Fleece Backed Membrane fully adhered to the insulation as specified below.

Option #1: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Option #2: Membrane is fully adhered to the insulation with approved hot asphalt applied at 20-25 lb./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -217.5 psf. (See General Limitation #9.)

Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(5): One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Invinsa Roof Board		
Minimum ¼" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with ¾" wide beads of JM Two-Part Urethane Insulation Adhesive, 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Membrane fully adhered to the insulation as specified below.

Option #1: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Water Based) applied at a rate of 1 gal./sq., with min. 1.5" heat welded side laps on the substrate.

Option #2: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -105 psf. (See General Limitation #9.)

Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type A(6): One or more layers of insulation adhered with approved adhesive; membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI		
Minimum 1.5" thick	N/A	N/A

Note: All insulation shall be adhered to the deck with ¾" wide beads of JM Two Part Urethane Insulation Adhesive, 12" o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Membrane fully adhered to the insulation as specified below.

Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -217.5 psf. (See General Limitation #9.)

Membrane Type: Single ply, PVC
Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type C(1): One or more layers of insulation simultaneously attached. Membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	6 with 7	1: 2 ft²

Note: All layers shall be simultaneously fastened. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Fleece Backed membrane adhered to the insulation as specified below.

Option #1: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Water Based) applied at a rate of 1 gal./sq. on the substrate with min. 1.5" heat welded side laps.

Option #2: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Option #3: Membrane is fully adhered to the insulation with approved hot asphalt applied at 20-25 lb./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -45 psf. (See General Limitation #7.)



Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type C(2): All layers of insulation simultaneously attached. Membrane adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
Plywood		
Minimum 19/32" thick	6 with 7	1:2 ft²

Note: All layers shall be simultaneously fastened. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Fleece Backed membrane is fully adhered to the insulation with approved hot asphalt applied at 20-25 lb./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -45 psf. (See General Limitation #9)



Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type C(3): All layers of insulation simultaneously attached. Membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft ²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	6 with 7	1:1.78 ft ²

Note: All layers shall be simultaneously fastened. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC Fleece Backed membrane fully adhered to the insulation as specified below.

Option #1: Membrane is fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Option #2: Membrane is fully adhered to the insulation with approved hot asphalt applied at 20-25 lb./sq. with min. 1.5" heat welded side laps.

Maximum Design

Pressure: -52.5 psf. (See General Limitation #7)



Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type C(4): One or more layers of insulation simultaneously attached. Membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following insulations:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	6 with 7	1: 2 ft²

Note: All layers shall be simultaneously fastened. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC membrane fully adhered with JM PVC Membrane Adhesive (Water Based) applied at a rate of 0.67 gal./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -45 psf. (See General Limitation #9.)

Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Concrete

System Type C(5): All layers of insulation simultaneously attached. Membrane fully adhered.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following:

Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	6 with 7	1:1.78 ft²

Note: All layers shall be simultaneously fastened. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC membrane fully adhered to the insulation with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -52.5 psf. (See General Limitation #7)

Membrane Type: Single ply, PVC
Deck Type 7I: Recover, Insulated
Deck Description: Concrete

System Type C(6): One or more layers of insulation preliminarily fastened; membrane bonded.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
SECUROCK or Invinsa Roof Board		
Minimum 0.25" thick	1 with 9	1:5.33 ft²
Plywood		
Minimum 19/32" thick	1 with 9	1:5.33 ft²

Note: All layers shall be simultaneously fastened. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC membrane is attached to the deck using High Load Fasteners and PVC RhinoPlates through preliminarily fastened insulation and then bonded to JM PVC RhinoPlates. Side lap is sealed with minimum 1.5" wide heat welds offset from plates.

Maximum Design Pressures: -45 psf. (See General Limitation #9)

Membrane Type: Single ply, PVC
Deck Type 7I: Recover, Insulated
Deck Description: Concrete

System Type C(7): One or more layers of insulation preliminarily fastened; membrane bonded.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer (Optional)	Insulation Fasteners (Table 3)	Fastener Density/ft²
SECUROCK or Invinsa Roof Board		
Minimum 0.25" thick	1 with 9	1:4 ft²
Plywood		
Minimum 19/32" thick	1 with 9	1:4 ft²

Note: All layers shall be simultaneously fastened. Insulation panels listed are minimum sizes and dimensions. If larger panels are used, the number of fasteners shall be increased using the same fastener density. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Membrane: JM PVC membrane is induction welded to JM PVC RhinoPlates. Side lap is sealed with minimum 1.5" wide heat welds offset from plates.

Maximum Design Pressures: -67.5 psf. (See General Limitation #7)

Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Existing Structural Non-Insulated Metal Panel Roof Assembly

System Type D(1): Membrane mechanically attached over metal roof panel, and preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of one of the following:

Base Insulation Layer: Insulation shall be loose laid between ribs or over panels of existing metal roof system.	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Maximum 1" thick	N/A	N/A
Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board		
Minimum 1/4" thick	N/A	N/A
Plywood		
Minimum 19/32" thick	N/A	N/A

Note: All insulation shall be preliminary attached to existing metal roof panels prior to installation of the roofing at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: JM PVC membrane attached through the preliminary attached insulation and existing roof assembly to 16 ga. min. steel purlins or structural steel supports spaced 5 ft. o.c. maximum as specified below.as specifie below.

Fastening #1: Membrane is mechanically attached using JM Purlin Fasteners and High Load Plates spaced 6" o.c. along supports within 6" wide laps, sealed with minimum 1-1/2" wide heat welds.
(Maximum Design Pressure -75 psf. See General Limitation #7)

Fastening #2: Membrane is mechanically attached using JM Purlin Fasteners and High Load Plates spaced 12" o.c. along supports within 6" wide laps, sealed with minimum 1-1/2" wide heat welds.
(Maximum Design Pressure -52.5 psf. See General Limitation #7)

Fastening #3: Membrane is mechanically attached using JM Purlin Fasteners and High Load Plates spaced 18" o.c. along supports within 6" wide laps, sealed with minimum 1-1/2" wide heat welds.
(Maximum Design Pressure -45 psf. See General Limitation #7)

Maximum Design Pressure: See fastening above.

Membrane Type: Single ply, PVC

Deck Type 7I: Recover, Insulated

Deck Description: Existing Structural Non-Insulated Metal Panel Roof Assembly

System Type D(2): Membrane mechanically attached over metal roof panel, and preliminarily fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One layer of one of the following:

Base Insulation Layer: Insulation shall be loose laid between ribs or over panels of existing metal roof system.	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 CGF, ENRGY 3 CGF 25 PSI, ValuTherm CGF, ValuTherm CGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5" thick	N/A	N/A
Top Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Maximum 1" thick	N/A	N/A
Invinsa Roof Board or SECUROCK Gypsum-Fiber Roof Board		
Minimum 1/4" thick	N/A	N/A
Plywood		
Minimum 19/32" thick	N/A	N/A

Note: All insulation shall be preliminary attached to existing metal roof panels prior to installation of the roofing at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft.

Membrane: JM PVC membrane attached through the preliminary attached insulation and existing roof assembly to 16 ga. min. steel purlins or structural steel supports spaced 5 ft. o.c. maximum as specified below.

Fastening #1: Membrane is mechanically attached using JM Purlin Fasteners and JM PVC RhinoPlates spaced 6" o.c. along *every other support* within 6" wide laps, sealed with minimum 1-1/2" wide heat welds.
(Maximum Design Pressure -45 psf. See General Limitation #7)

- Fastening #2: Membrane is mechanically attached using JM Purlin Fasteners and JM PVC RhinoPlates spaced 6" o.c. along **every** support within 6" wide laps, sealed with minimum 1-1/2" wide heat welds.
(Maximum Design Pressure -120 psf. See General Limitation #7)
- Fastening #3: Membrane is mechanically attached using JM Purlin Fasteners and JM PVC RhinoPlates spaced 12" o.c. along **every** support within 6" wide laps, sealed with minimum 1-1/2" wide heat welds.
(Maximum Design Pressure -67.5 psf. See General Limitation #7)
- Fastening #4: Membrane is mechanically attached using JM Purlin Fasteners and JM PVC RhinoPlates spaced 18" o.c. along **every** support within 6" wide laps, sealed with minimum 1-1/2" wide heat welds.
(Maximum Design Pressure -45 psf. See General Limitation #7)
- Maximum Design Pressure: See fastening above.

Membrane Type: Single Ply, PVC
Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 ga. steel deck with supports at a maximum 6ft. o.c. *The deck should record a Minimum Characteristic Resistance Force (MCRF) of 533 lbf. when tested with High Load Fasteners in accordance with TAS 105.

System Type D(3): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following to a maximum thickness of 1”:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1” thick	N/A	N/A

Note: All layers of insulation and membrane shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the insulation with JM High Load LH fastener 6” o.c. along the Polymer Membrane Batten placed within the center of every other 4" heat welded side lap for a maximum distance between rows of 71” o.c.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with min. 1.5” heat welded side laps.

Maximum Design Pressure: -60 psf (See General Limitation #9)

Membrane Type: Single Ply, PVC
Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 ga. steel deck with supports at a maximum 6ft. o.c. *The deck should record a Minimum Characteristic Resistance Force (MCRF) of 289 lbf. when tested with High Load Fasteners in accordance with TAS 105.

System Type D(4): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following to a maximum thickness of 1”:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1.5” thick	N/A	N/A

Note: All layers of insulation and membrane shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the insulation with JM High Load Screws & APB Plates spaced 6" o.c. within in the center of the 4" heat welded side laps.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with min. 1.5” heat welded side laps.

Maximum Design Pressure: -60 psf (See General Limitation #9)

Membrane Type: Single Ply, PVC
Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 ga. steel deck with supports at a maximum 6ft. o.c. *The deck should record a Minimum Characteristic Resistance Force (MCRF) of 398 lbf. when tested with High Load Fasteners in accordance with TAS 105.

System Type D(5): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following to a maximum thickness of 1”:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1” thick	N/A	N/A

Note: All layers of insulation and membrane shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the insulation with JM High Load Fasteners and High Load Plates spaced 12" o.c. within the 4" heat welded side laps.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with min. 1.5” heat welded side laps.

Maximum Design Pressure: -60 psf (See General Limitation #9)

Membrane Type: Single Ply, PVC
Deck Type 7I: Recover, Insulated

Deck Description: Minimum 22 ga. steel deck with supports at a maximum 6ft. o.c. *The deck should record a Minimum Characteristic Resistance Force (MCRF) of 307 lbf. when tested with High Load Fasteners in accordance with TAS 105.

System Type D(6): Membrane mechanically attached over preliminary fastened insulation.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

One or more layers of the following to a maximum thickness of 1”:

Base Insulation Layer	Insulation Fasteners (Table 3)	Fastener Density/ft²
ENRGY 3, ENRGY 3 25 PSI, ValuTherm, ValuTherm 25 PSI, R-Panel, R-Panel 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 AGF, ENRGY 3 AGF 25 PSI, ValuTherm AGF, ValuTherm AGF 25 PSI, ENRGY 3 FR, ENRGY 3 FR 25 PSI		
Minimum 1” thick	N/A	N/A

Note: All layers of insulation and membrane shall be simultaneously attached. See membrane below for fasteners and density. Refer to Roofing Application Standard RAS 117 for insulation attachment requirements.

Base Sheet: One ply of DynaFast 180 S mechanically fastened through the insulation with JM High Load Fasteners and High Load Plates spaced 6" o.c. within the every other 4" heat welded side laps for a maximum distance between rows of 70”.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with min. 1.5” heat welded side laps.

Maximum Design Pressure: -52.5 psf (See General Limitation #9)

Membrane Type: Single ply, PVC

Deck Type 7: Recover

Deck Description: Lightweight Insulating Concrete over minimum 22 ga. steel deck with structural supports a maximum 6ft. o.c.; *The deck should record a Minimum Characteristic Resistance Force (MCRF) of 570 lbf. when tested with JM High Load Screws in accordance with TAS 105.

System Type E(1): Membrane mechanically fastened through existing Single-ply roofing into deck.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: JM PVC Fleece Backed (60 mil) membrane 10' wide mechanically fastened to steel deck with JM High Load fasteners & High Load Plates 6" o.c. within 6" wide side laps with min. 1.5" heat welded side laps.

Maximum Design Pressure: -60 psf (See General Limitation #7).

Membrane Type: Single ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Cementitious Wood Fiber attached 8" o.c. with 1/4"-14 PH screws and 2" diameter metal plates to structural supports at a maximum 32" o.c.*The deck should record a Minimum Characteristic Resistance Force (MCRF) of 131 lbf when tested with Twin-Loc Nails in accordance with TAS 105.

System Type E(2): Base sheet mechanically fastened.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Sheet: One ply of DynaFast 180 S mechanically fastened with min. 1.8" Twin-Loc Nail without integrated plate & Straight Line Batten Bar spaced 6" o.c. within the 4" wide heat welded side laps and 6" o.c. at one intermediate row centered between the laps.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -60 psf (See General Limitation #9.)

Membrane Type: Single ply, PVC

Deck Type 7: Recover, Non-insulated

Deck Description: Lightweight Concrete with structural supports a maximum 5ft. o.c. *The deck should record a Minimum Characteristic Resistance Force (MCRF) of 178 lbf when tested with Twin-Loc Nail in accordance with TAS 105.

System Type E(3): Base sheet mechanically fastened over existing roof.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Base Sheet: One ply of DynaFast 180 S mechanically fastened with Twin-Loc Nail and Straight Line Batten Bar spaced 6" o.c. in the center of the minimum 4" wide heat welded side laps.

Membrane: JM PVC Fleece Backed applied with approved mopping asphalt at an application rate of 20-40 lbs./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -60 psf (See General Limitation #9.)



Deck Type 7: Recover, Non-insulated

Deck Description: Concrete

System Type F(1): Membrane fully adhered to existing roof.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: PVC Fleece Backed membrane fully adhered as specified below.

Option #1: Membrane is fully adhered with JM PVC Membrane Adhesive (Water Based) applied at a rate of 1 gal./sq., on the substrate with min. 1.5" heat welded side laps.

Option #2: Membrane is fully adhered with JM PVC Membrane Adhesive (Low VOC) applied at a rate of 0.83 gal./sq., on both the membrane and the substrate for a total of 1.67 gal./sq. with min. 1.5" heat welded side laps.

Option #3: Membrane is fully adhered with approved hot asphalt applied at 20-25 lb./sq. with min. 1.5" heat welded side laps.

Maximum Design Pressure: -217.5 psf. (See General Limitation #9.)



Deck Type 7: Recover, Non-insulated

Deck Description: Concrete

System Type F(2): Membrane adhered to existing modified bitumen granule surfaced roof system.

All General and System Limitations apply. Roof accessories not listed in Table 1 of this NOA are not approved and shall not be installed unless said accessories demonstrate compliance with prescriptive Florida Building Code requirements and are field fabricated utilizing the approved membranes listed in Table 1.

Membrane: PVC Fleece Backed membrane fully adhered with MBR Bonding Adhesive Adhesive at a rate of 1.5 gal/sq. or JM Two Part Urethane Adhesive applied in $\frac{3}{4}$ " ribbons spaced 12" o.c. running parallel to the sheet width with min. 1.5" heat welded side laps.

Maximum Design Pressure: -90 psf. (See General Limitation #9.)

RECOVER SYSTEM LIMITATIONS:

1. Existing roof surfaces used as a bonding substrate shall be tested for uplift resistance, in compliance with Miami-Dade County Protocol TAS 124 to the calculated design pressures of the field, perimeter and corner areas, determined in compliance with Chapter 23 of the South Florida Building Code.
2. If mechanical attachment to the structural deck through the existing roof system is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117 and/or RAS 137, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.
3. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117 and/or RAS 137. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE



NOA No.: 12-1113.22
Expiration Date: 12/06/17
Approval Date: 06/26/14
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